

If the land is beneath the sea level, as in Holland, then the water must be pumped out of the area, the latter being protected from the encroachments of the sea by an embankment.

Straightening the course of rivers, likewise, is efficient in causing increased scour, a lowering of the bed and a lessened liability to overflow.

Ponds are easily drained by simply cutting a ditch of the proper size through the natural or artificial embankment surrounding them. The greater the extent of the water shed, and the greater the rainfall, and the imperviousness of the surface, the larger of course is the ditch.

The so called "wet weather" ponds, often on high ground, should never be tolerated, as they present the very conditions for fostering malaria—a large area, alternately wet and dry.\*

The natural division of a country for drainage purposes is into districts belonging to the same water shed, bounded, of course, by the ridges and streams. Considerable inconvenience has been caused in some thickly settled countries by a disregard of natural boundaries.

The extent to which drains exert an influence on the ground on either side depends on their depth, and the character of the soil, whether very retentive or porous. Their action is analagous to that of wells given further on, except that the bottom of the ditch does not generally reach the level of complete saturation of the ground as is often the case in wells.

It is best not to open new ditches from "June to November" in malarial districts, unless for house drainage. Cellars should be drained by leading a pipe from below the bottom of the cellar to some convenient exit to the open air

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\*See Kerr's *Geology of N. C.*, (Introduction) for an excellent presentation of the leading topographical features of the State, especially its swamps and pocosins, as relating to the matter in hand.